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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/308,314	05/13/1999	JOACHIM BANDEMER	3446US	5993

7590 03/04/2002

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EXAMINER	
GRAHAM, GARY K	
ART UNIT	PAPER NUMBER
1744	16

DATE MAILED: 03/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-16

Offic Action Summary	Application N .	Applicant(s)	
	09/308,314	BANDEMER ET AL.	
	Examiner	Art Unit	
	Gary K Graham	1744	

-- The MAILING DATE of this communication appears on the cover sh et with the correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-30* is/are pending in the application.

4a) Of the above claim(s) *4,7-12 and 18-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5,6,13-17 and 25-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *15* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Prosecution Application

The request filed on November 12, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/308,314 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 13-17, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epple et al '464 in view of Bray '904.

The patent to Epple discloses the invention substantially as is claimed, including plastic washing arm (2) for movement up and over shield (15') at a distance therefrom. The washing arm has a washing nozzle (7) thereon for supplying fluid to said shield. Said nozzle appears to be "sprayable" on the shield during all movement of the washing arm. Nothing would prevent such. A drive motor (not shown but disclosed) drives said arm out and up over the shield. With respect to claim 13, note push rod (2b). With respect to claim 15, note cover (16) to close the opening (20) from which the arm extends. With respect to claim 16, the particular method in which the arm is produced does not affect the final product and is not of patentable significance in the product claim. With respect to claim 26, since the device of Epple is switched such that the arm is driven out of the rest position into the operating setting and back again, such is considered to meet the control device limitation.

The patent Epple discloses all of the above recited subject matter with the exception of the nozzles being "fluidic nozzles" which provide and oscillating spray pattern.

The patent to Bray discloses a fluidic nozzle that produces an oscillating spray pattern to provide wide coverage on a windshield surface. The nozzle has a swirl chamber (26) with return ducts (24,25) to an inlet region (21) of said swirl chamber. Such an arrangement induces the oscillation of the emerging fluid in the same manner applicant's does.

It would have been obvious to one of skill in the art to provide the device of Epple with fluidic nozzles, as taught by Bray, to provide increased spray coverage as well as increased cleansing action. To provide such oscillation transverse to the direction of movement of the washing arm appears obvious such that the entire shield receives spray. Otherwise, the shield would only be partially cleaned. Use of fluidic nozzles is well known in the wiper cleaning art.

Claims 1, 3, 5, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molari '375 in view of Bray '904.

The patent to Molari discloses the invention substantially as is claimed, including washing arm (3) for movement over shield (L) at a distance therefrom. The washing arm has washing nozzles (6,7) therein for supplying fluid to said shield. Said nozzles appear to be sprayable during all movement of the washing arm. A fluid motor (2) drives said arm over the shield. Said fluid motor is driven by an electric pump (14). Thus, the arm is movable via an electric motor and a fluid motor. With respect to claim 5, note valve (10). With respect to claim 26, since the device of Molari is switched to spray as it moves from start to end over the entire sweeping motion, such is considered to be a control device.

The patent Molari discloses all of the above recited subject matter with the exception of the nozzles being "fluidic nozzles" which provide and oscillating spray pattern.

The patent to Bray discloses all of the above recited subject matter.

It would have been obvious to one of skill in the art to provide the device of Molari with fluidic nozzles, as taught by Bray, to provide increased spray coverage as well as increased cleansing action. To provide such oscillation transverse to the direction of movement of the washing arm appears obvious such that the entire shield receives spray. Otherwise, the shield would only be partially cleaned. Use of fluidic nozzles is well known in the wiper cleaning art.

Claims 1, 3, 5 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merkel et al '051 in view of Bray '904.

The patent to Merkel discloses the invention substantially as is claimed, including washing arm (18) for movement over shield (14) at a distance therefrom. The washing arm has washing nozzles (20,22) therein for supplying fluid to said shield. Said nozzles are sprayable during all movement of the washing arm since the pump (36) is actuated at the same time as the drive motor (32). The drive motor (32) is electric and drives said arm over the shield. With respect to claim 26, since the device of Merkel is switched to spray as it moves from start to end over the entire sweeping motion, such is considered to be a control device.

The patent Merkel discloses all of the above recited subject matter with the exception of the nozzles being "fluidic nozzles" which provide and oscillating spray pattern.

The patent to Bray discloses all of the above recited subject matter.

It would have been obvious to one of skill in the art to provide the device of Merkel with fluidic nozzles, as taught by Bray, to provide increased spray coverage as well as increased cleansing action. To provide such oscillation transverse to the direction of movement of the washing arm appears obvious such that the entire shield receives spray. Otherwise, the shield would only be partially cleaned. Use of fluidic nozzles is well known in the wiper cleaning art.

Claims 6 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merkel et al '051 in view of Bray '904 as applied to claims 1 and 3 above, and further in view of Keen '424.

The patents to Merkel and Bray disclose all of the above recited subject matter with the exception of heating elements arranged in the fluid duct or washing nozzle, wherein the electric heating for the fluid duct or nozzle being resistance wire heating.

The patent to Keen discloses the use of resistance wire heating (86) to heat the supply tube (71) and the nozzle (70). It should be noted that use of resistance wire heating to heat both nozzles and supply lines is notoriously well known.

It would have been obvious to one of skill in the art to provide electric heating to the washing system of the modified Merkel washing system, as clearly suggested by Keen, to provide instant and direct heating where needed, such as in the tubes and nozzles.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Epple et al '464 in view of Bray '904 as applied to claim 1 above, and further in view of Edwards '337.

The patents to Epple and Bray disclose all of the above recited subject matter with the exception of the pump for selectively supplying the fluid being able to either supply fluid to the front windshield of the automobile or to the light shields of the automobile.

The patent to Edwards discloses a wiper assembly wherein pump (16) selectively conveys fluid via a valve (25) in one of two directions. One direction is to the windshield (11) via nozzles (18) and the other direction is to the shields (12) of the lights via nozzles (20).

It would have been obvious to one of skill in the art to provide the system of Epple with a fluid pump assembly, as clearly suggested by Edwards, to enable both the windshield and the headlights to be cleaned through the use of a single pump. Such would limit the amount of hardware necessary to clean both the windshield and head light shields.

Claims 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epple et al '464 in view of Molari '375 and Bray '904.

The patent to Epple discloses the invention substantially as is claimed as recited above, with the exception of the motor being a fluidic motor to move the spray arm outward and the nozzles being "fluidic nozzles" which provide an oscillating spray pattern.

The patent to Molari discloses all of the above recited subject matter, including the use of a fluidic motor to provide motivation to the wiper arm. It is noted that fluidic motors and electric motors are art recognized alternative drive motors that may be readily substituted for one another.

It would have been obvious to one of skill in the art to employ a fluidic motor for the drive motor of Epple instead of an electric motor, as clearly suggested by Molari, as a mere alternative drive source. There is no criticality to using an electric drive motor in Epple. Clearly any drive motor, pneumatic, fluidic, electric, etc, could be used.

It also would have been obvious to one of skill in the art to provide the device of Epple with fluidic nozzles, as taught by Bray, to provide increased spray coverage as well as increased cleansing action. To provide such oscillation transverse to the direction of movement of the washing arm appears obvious such that the entire shield receives spray. Otherwise, the shield would only be partially cleaned. Use of fluidic nozzles is well known in the wiper cleaning art.

Response to Arguments

Applicant's arguments with respect to claims 1 and 25 have been considered but are moot in view of the new ground(s) of rejection. The thrust of applicant's arguments is that the fluidic nozzle includes a swirl chamber with return ducts. Such is not shown by Makoto. While the examiner agrees that Makoto does not disclose such a fluidic nozzle, such nozzles are known for use to spray vehicle windshields. As discussed above, Bray clearly discloses just such a nozzle that includes a swirl chamber and return ducts. Such oscillating nozzles are employed particularly because of their increased spray pattern thus promoting more complete coverage. It appears such nozzle can be employed to spray headlights as well since the spray pattern would likewise be increased to promote more complete coverage.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K Graham whose telephone number is 703-308-1270. The examiner can normally be reached on Tuesday to Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7719 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-7719.

GARY K. GRAHAM
PRIMARY EXAMINER
GROUP 1700

GKG
February 20, 2002